



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
 AFFAIRS (PERA)
 BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
 PRODUCT CONTROL SECTION
 11805 SW 26 Street, Room 208
 Miami, Florida 33175-2474
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Tarco Specialty Products, Inc.
One Information Way, Suite 225
Little Rock, AR 72202

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: 30# ASTM Specification Felt, EasyLay, Fast90, PS200^{HT}, PS200^{MU}, MS300, SS400, NR500^{HT}

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews and revises NOA No. 09-0824.06 and consists of pages 1 through 10.

The submitted documentation was reviewed by Jorge L. Acebo.



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 Expiration Date: 01/25/17
 Approval Date: 01/19/12
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ROOFING COMPONENT APPROVAL

Category: Roofing
Sub-Category: Underlayment
Material: Asphalt, SBS, Polyester

SCOPE:

This acceptance is for **30# ASTM Specification Felt, EasyLay, Fast90, PS200^{HT}, PS200^{MU}, MS300, SS400 and NR500HT** underlayments as manufactured by Tarco, for use with approved prepared roof assemblies as described in this Notice of Acceptance; designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone of the Florida Building Code.

PRODUCTS DESCRIPTION:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
30# ASTM Specification Felt	3' x 72" rolls	ASTM D 226 Type II	Asphalt saturated felt underlayment
EasyLay	3' x 133' 4" rolls	ASTM D 226 Type II	Sheet material comprising a polyester substrate coated with bituminous coating for use as an underlayment in roofing applications. Designed as a shingle and metal roofing underlayment and for use in tile roofing assemblies when used with an approved TAS 103 tile underlayment cap sheet.
Fast90	3' x 36' rolls	TAS 103 ASTM D 249 ASTM D 6380	Granular surfaced, asphalt-impregnated organic felt reinforced, bituminous sheet material with a self-adhesive bottom layer, for use as an underlayment in sloped roof assemblies. Designed as a tile roofing underlayment.
PS200 ^{HT}	3' x 66'8" rolls	TAS 103 ASTM D 1970	Fabric surfaced, fiberglass reinforced, SBS modified bituminous sheet material with a self-adhesive bottom layer, for use as an underlayment in sloped roof assemblies. Designed as a tile and metal roofing underlayment.
PS200 ^{MU}	3' x 66'8" rolls	ASTM D 1970	Film surfaced, fiberglass reinforced, SBS modified bituminous sheet material with a self-adhesive bottom layer, for use as an underlayment in sloped roof assemblies. Designed as a metal and shingle roofing underlayment.



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MS300	3' x 66'8" rolls 3' x 33'4" rolls	ASTM D 1970	Fine granular surfaced, fiberglass reinforced, bituminous sheet material with a self-adhesive bottom layer, for use as an underlayment in sloped roof assemblies. Designed as an ice and water shield, and a shingle roofing underlayment.
SS400	3' x 66'8" rolls 3' x 33'4" rolls	ASTM D 1970	Smooth surfaced, fiberglass reinforced, bituminous sheet material with a self-adhesive bottom layer, for use as an underlayment in sloped roof assemblies. Designed as an ice and water shield, and a shingle and metal roofing underlayment.
NR500 ^{HT}	3' x 66'8" rolls	ASTM D 1970	Film surfaced, non-reinforced, bituminous sheet material with a self-adhesive bottom layer, for use as an underlayment in sloped roof assemblies. Designed as an ice and water shield, and a shingle and metal roofing underlayment.

MANUFACTURING LOCATION:

1. Greencastle, PA
2. Belton, TX

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Atlantic & Carribean Roof Consulting, LLC	ACRC06-013	TAS 103	06/14/06
PRI Asphalt Technologies	TOT-003-02-01	ASTM D226 Type II	08/22/02
	TOT-029-02-01	TAS 110, ASTM D249 & D 6380	07/05/05
	TOT-030-02-01	TAS 110, ASTM D249 & D 6380	07/05/05
	TOT-041-02-01	TAS 110, ASTM D226 Type II	05/24/06
	TOT-042-02-01	ASTM D4798 & ASTM G155	05/22/07
Trinity ERD	T3580.10.06-2	TAS 103	10/26/06
	T3580.10.06	TAS 103, ASTM D6380	10/12/06
	T30160.08.09-R1	ASTM D1970	10/12/10
	T10550.07.08	ASTM D4798 & ASTM D1970	07/30/08
	T32530.08.10	ASTM D1970	08/17/10
	T33190.08.10	TAS 103	08/06/10
	T37610.07.11	TAS 114-D	07/29/11
IRT-Arcon	IRT07-0006	ASTM D1970	07/11/07
	IRT 07-0036	ASTM D1970	02/22/08
	IRT08-0002	ASTM D1970	02/22/08



GENERAL LIMITATIONS – 30# ASTM SPECIFICATION FELT:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code.
3. 30# ASTM Specification Felt may be used with any approved roof covering Notice of Acceptance listing ASTM D 226 Type II felt as a component part of an assembly in the Notice of Acceptance.
4. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

INSTALLATION REQUIREMENTS – 30# ASTM SPECIFICATION FELT:

1. 30# ASTM Specification Felt shall be installed in strict compliance with applicable Building Codes.
2. Observe and comply with roofing practices and guidelines as outlined by the National Roofing Contractors Associations (NRCA) when installing 30# Felt.
3. During installation of 30# Felt, comply with Occupational Safety and Health Administration (OSHA) safety standards; use common sense measures and adequate safety precautions to prevent accidents.
4. 30# ASTM Specification Felt shall be installed with a minimum 4” end lap in a shingle layer fashion and fastened as required by applicable system assemblies NOA or applicable Building Code.

GENERAL LIMITATIONS - EASYLAY:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code.
3. EasyLay shall be applied to a clean and dry surface.
4. EasyLay shall not be torched or hot mopped to. Refer to manufacturer’s published literature for additional information.
5. EasyLay shall not be used on slopes less than 2:12, unless the slope is acceptable to the weather resistant covering. In general, on slopes less than 4:12, a double layer of EasyLay is recommended. Double layer application is best achieved by using 19” side laps, making sure the side laps are ‘shingled in’ to shed water.
6. When installing EasyLay, the roof system must include proper ventilation.
7. Refer to prepared roofing system Product Control Notice of Acceptance for listed approval of EasyLay with specific prepared roofing products. EasyLay may be used with any approved roof covering Notice of Acceptance listing ASTM D 226 Type II felt as a component part of an assembly in the Notice of Acceptance.
8. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.
9. EasyLay shall not be left exposed for longer than 30 days after application.
10. The manufacturer reserves the right to change product exposure period at any time; not to exceed the preceding maximum time limitations.



APPROVED ASSEMBLIES - EASYLAY:

- System E(1):** Anchor sheet mechanically fastened to deck.
- Deck Type 1:** Wood, Non-Insulated.
- Deck Description:** Minimum 19/32” plywood or wood plank.
- Anchor/Base Sheet:** One or more plies of EasyLay underlayment, with a minimum 4” wide side lap and a minimum 8” wide end lap, mechanically fastened to deck.
- Fastening:** Approved nails and tin caps 6” o.c. within lap and two equally spaced staggered rows 12” o.c. in the field (for Anchor/Base sheet).
- Surfacing:** Approved Roof Assemblies in lieu of FBC perscribed ASTM D 226 Type II felt.

INSTALLATION REQUIREMENTS - EASYLAY:

1. EasyLay shall be installed in strict compliance with applicable Building Codes.
2. Observe and comply with roofing practices and guidelines as outlined by the National Roofing Contractors Associations (NRCA) when installing EasyLay.
3. During installation, comply with Occupational Safety and Health Administration (OSHA) safety standards; use common sense measures and adequate safety precautions to prevent accidents.
4. EasyLay shall be acceptable for use with asphaltic shingles, wood shakes and shingles, quarry slate, tile and metal roofing assemblies.
5. Re-fasten any loose decking panels, and check for protruding nail heads prior to the application of EasyLay.
6. Place a full width piece of EasyLay, parallel to the eave (low) edge of the roof.
7. Unroll EasyLay 2 to 3 feet, with the lay lines facing up, and position the end of it to the edge of the eave and rake.
8. Install a few fasteners at the top, near the rake, and roll out the sheet to a maneagable length.
9. Pull, straighten and align the sheet so that any wrinkles are eliminated and the sheet is even with the eave edge.
10. EasyLay shall be fastened with approved roofing nails and tincaps or approved capnails, driven by hand or pneumatically, spaced 6” o.c. at all laps in the center of the seam area, and two staggered rows fastened 12” o.c. in the field of the sheet.
11. When installing nails, apply so that the head of the nail is flush with the EasyLay surface, without cutting into the EasyLay surface.
12. Fastening shall be done from the top to avoid walking or kneeling on unsecured sheet.
13. Continue on to the end of the substrate and fasten down.
14. Align the next roll over the preceding sheet so as to form a minimum 4” overlap.
15. Then install the just placed sheet, per instructions above.
16. The bottom of the second course of EasyLay shall lay on top of the first course so that any water will flow over the top of EasyLay.



17. Apply subsequent sheets in the same manner, with 4" side laps and 6" end laps over the preceding sheets.
18. When the top course is reached, lap about 6" of EasyLay over the ridge.
19. Install EasyLay a minimum of 6" up any vertical surfaces.
20. Stagger the end laps a minimum of 18" from the preceding course.
21. After installing EasyLay on the field of the roof, install drip edge at the eaves (if used).
22. When applying EasyLay in the valley, start at the low point and work to the high point, rolling the membrane from the center outward in each direction. Make sure there are no rips or large wrinkles in the EasyLay.
23. Before applying horizontal sections of EasyLay, install a vertical length of EasyLay down the center of the valley.
24. Several sections of EasyLay can be used, but be certain to overlap the higher sections several inches so any water will flow over the top of the sheet.
25. EasyLay underlayment in the valley areas must be covered with code prescribed metal or other approved valley lining material.
26. Apply a minimum 1/16" thick uniform layer of SBS trowel grade modified flashing cement to water proof areas of EasyLay where any cuts or tears have occurred. Seams or joints may require the application of an SBS trowel grade modified flashing cement.
27. Flash vent pipes, stacks, chimneys and penetrations in compliance with Roof Assembly current Product Control Notice of Acceptance and applicable Building Code.

GENERAL LIMITATIONS – TARCO SELF ADHERED UNDERLAYMENTS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code.
3. Tarco self adhering underlayments shall be applied only when material interface temperatures are 40⁰ F and rising.
4. Tarco self adhered underlayments shall not be installed when any form of moisture such as water, dew, rain, etc. is present on the substrate.
5. Tarco self adhered underlayments are to be applied to a smooth, clean and dry surface, with the deck free from irregularities.
6. Ensure roof has positive drainage prior to installation of Tarco self adhered underlayments.
7. Tarco self adhered underlayments shall not be applied over a pre-existing roof membrane or system.
8. After installation of Tarco self adhered membranes, wait a minimum of 48 hours before roof loading of tiles.
9. Care should be taken during the loading procedure to keep foot traffic to a minimum and avoid dropping the roof covering directly on the underlayment.



10. All tiles shall be staged (two tiles perpendicular to slope, four tiles on top parallel to slope) as per manufacturer's requirements, not to exceed 6-high, to the standard maximum roof pitch of 6 :12 for flat tiles and 6 :12 for lugged tiles (See Tile Staging Method diagram below).

At roof slopes greater than the above limitations, the use of loading battens or toe boards are required to load the roof tile.

Tile Staging Method



11. The manufacturer reserves the right to change the tile staging method at any time as well as the number of tiles stacked, not to exceed the preceding maximum number of tiles limitation.
12. EasyLay, PS200^{MU}, MS300, SS400, and NR500^{HT} shall not be left exposed as a temporary roof for longer than 30 days after application. PS200^{HT} shall not be left exposed as a temporary roof for longer than 120 days after application. Fast90 shall not be left exposed as a temporary roof for longer than 180 days after application. The manufacturer reserves the right to change product exposure period at any time; not to exceed the preceding maximum time limitations.
13. NR500^{HT} is not recommended for extreme high temperature environments such as under copper or zinc metal roofing.
14. Refer to prepared roofing system Product Control Notice of Acceptance for listed approval of Tarco underlayments with specific prepared roofing products. Tarco self adhered underlayments may be used with any approved roof coverings Notice of Acceptance listing Tarco self adhering underlayments or the ASTM standard which the self adhering underlayments meet as a component part of an assembly in the Notice of Acceptance.
If Tarco self adhered underlayments or the ASTM standards are not listed, a request may be made to the Authority Having Jurisdiction (AHJ) or the Miami-Dade County Product Control Department for approval provided that appropriate documentation is provided to detail compatibility of the product, wind uplift resistance, and fire testing results.
15. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

APPROVED ASSEMBLIES – TARCO SELF ADHERED UNDERLAYMENTS

System E(1): Anchor sheet mechanically fastened to deck, membrane adhered.
Deck Type 1: Wood, Non-Insulated.
Deck Description: Minimum 19/32” plywood, wood plank.
Anchor/Base Sheet: One or more plies of ASTM D226 Type II, ASTM D2626, or EasyLay underlayment, with a minimum 4” wide side lap and a minimum 8” wide end lap, mechanically fastened to deck.
Fastening: Approved nails and tin caps 6” o.c. within lap and two equally spaced staggered rows 12” o.c. in the field (for Anchor/Base sheet only).
Membrane: All Tarco self adhered membranes applied to approved Anchor/Base Sheet. (See #15 below for back nailing)
Surfacing: Approved Roof Assemblies as specified below.

System F(1): Membrane self-adhered to concrete deck.
Deck Type 3: Concrete, Non-Insulated.
Deck Description: Structural concrete or concrete plank min. 2500 psi.
Deck Preparation: The concrete deck shall be clean and dry and cured for a minimum of 28 days.
Anchor/Base Sheet: None
Fastening: Membrane shall be back nailed with approved concrete fasteners and 1⁵/₈” approved tin caps at a maximum spacing of 9” o.c. at the head laps and be covered by the preceding layer. No back nail fasteners or tin caps shall remain exposed.
Membrane: Tarco PS200^{HT} self adhered membrane applied directly to concrete deck. (See Fastening above for back nailing)
Surfacing: Approved Roof Assemblies as specified below.

INSTALLATION REQUIREMENTS – TARCO SELF ADHERED UNDERLAYMENTS:

1. Tarco self adhering underlayments shall be installed in strict compliance with applicable Building Codes.
2. Observe and comply with roofing practices and guidelines as outlined by the National Roofing Contractors Associations (NRCA) when installing Tarco self adhering underlayments.
3. During installation, comply with Occupational Safety and Health Administration (OSHA) safety standards; use common sense measures and adequate safety precautions to prevent accidents.
4. Fast90 and PS200^{HT} shall be acceptable underlayments for mechanically fastened roof tile and adhered roof tile applications. MS300 and SS400 shall be acceptable underlayments for asphaltic shingles, wood shakes and shingles, and slate or simulated slate roof assemblies. PS200^{MU} and NR500^{HT} shall be acceptable underlayments for asphaltic shingles, wood shakes, shingles, and metal roof panel assemblies.
5. Re-fasten any loose decking panels, and check for protruding nail heads prior to the application of the Tarco self adhering underlayments.
6. Tarco self adhering underlayments shall not be adhered directly over any pre-existing roof membrane.



7. All approved substrates are to be clean, dry and free of any loose debris or moisture prior to the application of the Tarco self adhering underlayments. Refer applicable building codes prior to installation to verify acceptable substrates.
8. Prime all metal collars, flashing, valleys, liner, drip edge and concrete deck substrate with ASTM D 41 primer, water based acrylic or water based polymer modified primer.
9. Contractor may cut the underlayments into sections for workability and allow to relax prior to application.
10. Place the underlayments over metal drip edge in accordance with RAS 111.
11. Install the first course of underlayment parallel to the eave edge.
12. Apply the underlayment, working from the center of the material continuously to the ends of the sheet (half of the length of the sheet is the center); taking care to avoid wrinkles and ridges.
13. Remove the underlayments release film rapidly in a continuous fashion. Ensure the bottom adhesive side of the membrane does not adhere to its self. In the event this transpires, separate the two layers immediately. After some time, it may become impossible to do so without damaging the material.
14. It is recommended that end laps be staggered a minimum of 18" from the preceding course.
15. Underlayments are to be back nailed along the head lap. The nails shall be, 11 guage 1¹/₄" approved ring shank type applied with a minimum of a 1⁵/₈" approved tin cap or approved capnail as required per the High Velocity Hurricane Zone (HVHZ) section of the FBC, at a minimum rate of 9" o.c. The head lap of the preceding layer of underlayment is to cover the area being back nailed.
16. Roll or broom the entire membrane surface paying special attention to all overlap areas "side laps, end laps, T-joints" to ensure adhesion with acceptable substrates. A minimum of a 28 lb weighted roller may be used for steep slope applications. The use of a soft bristled push broom is acceptable on steeper slopes. The above mentioned procedures are necessary in order to apply uniform pressure and allow for contact of the membranes.
17. Apply 1/8" thick uniform layer of SBS trowel grade modified bitumen asphalt adhesive / flashing cement throughout the contact area of the 6" granule over granule and fabric over fabric end laps. Once the aforementioned procedure has been completed, the membrane must then be hand rolled in place in order to ensure contact of membrane and achieve a minimum of 1/8th" asphaltic bleed out in designated area.
18. Tarco self adhering underlayments shall be applied to protrusions, slope changes, valleys, curbs, and other roof top penetrations before any other sections of the roof.
19. When applying underlayments in the valley, start at the low point and work to the high point, rolling the membrane from the center outward in each direction.
20. For ridge applications, center the underlayment and roll from the center outward in both directions.
21. Flash vent pipes, stacks, chimneys and penetrations in compliance with Roof Assembly current Product Control Notice of Acceptance and applicable Building Code.
22. All protrusions or drains shall be initially taped with a 6" piece of like kind membrane. The flashing tape shall be pressed in place and formed around the protrusion to ensure a tight fit. A second layer of like kind membrane shall be applied over the flashing detail.
23. Vertical strapping of Tarco self adhering membranes is acceptable.



MANUFACTURER’S CONSIDERATIONS:

1. Fast90, PS200^{HT}, PS200^{MU}, MS300, SS400, NR500^{HT} can be directly adhered to wood decks. Ensure that such application is in compliance with applicable Building Code.
2. For best results when adhering Fast90, PS200^{HT}, PS200^{MU}, MS300, SS400, NR500^{HT} directly to wood decks, surface may be primed with an ASTM D41 asphalt primer, water based acrylic or water based polymer modified primer.
When using primer, follow the manufacturer’s recommendation for ‘cure time’ prior to application of Fast90, PS200^{HT}, PS200^{MU}, MS300, SS400, NR500^{HT}
3. When using Fast90 and PS200^{HT} in tile roofing applications, use of loading battens or toe boards on roof slopes greater than 6:12 and higher is recommended.
4. Code body requirements supersede manufacturer’s recommendations and installation guidelines.

BUILDING PERMIT REQUIREMENTS:

Application for building permit shall be accompanied by copies of the following:

1. This Notice of Acceptance.
2. Any other documents required by the Building Official or applicable building code in order to properly evaluate the installation of these materials.

LABELING:

All membranes or packaging shall bear the imprint or identifiable marking of the manufacturer's name or logo and the following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade County Product Control Seal as shown below.



END OF THIS ACCEPTANCE



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